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ART. X.—*A Classification of the Foraminifera.*

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Introduction.

Until about the close of the period marked by the issue of Dr. H. B. Brady's monograph on the "Challenger" Foraminifera there was a gradual development of a plan of classification based primarily on the form of the test. This was of necessity an artificial method of classification, inasmuch as family names, such as Textulariidae, embraced both arenaceous and hyaline kinds; other families again had their plans of growth duplicated in adjacent ones.

Neumayr (1887) regarded the Astrorhizidae as the earliest forms; and, from this, three principal legions proceeded, the branches of the Miliolines, the Nodosarines and the Rotalines, each with their arenaceous isomorphs.

Ludwig Rhumbler (1895) made a great advance in classification, for he had closely studied the phylogenetic relationships of many of the genera. His conclusions are largely embodied in the latest classifications of Cushman and Galloway, and many are utilized in the present plan.

As Neumayr had already suggested, Rhumbler postulated that the most primitive forms were simple arenaceous tubes; these were succeeded by the sandy spiral tubes (Ammodiscidae) and, later, by the hyaline spiral forms (Spirillinidae). Rhumbler regarded the subarenaceous *Nodosinella* and the coiled and segmented *Endothyra*, as an offshoot from the sandy-tubed stock, which further passed into Rotaliidae and Nodosariidae.

Eimer and Fickert (1899) suggested a classification which was based on form only, the shell structure being regarded as merely of secondary importance. These morphological types were foreshadowed by d'Orbigny's earlier arrangement of Stichostègues, Helicostègues, &c.

Schubert (1907 and 1920) formulated a partial classification based both on morphology and phylogeny, and illustrated the relationships of several important groups.

A great advance was made, however, by Cushman (1925), who formulated a scheme partly based on the earlier work of Rhumbler and Schubert, and showed the affinities of the genera

much more completely than previous authors. This classification was completed in 1928 (Cushman, 1928). Cushman (1933, p. 54) rightly points out that "An ideal classification should be based upon the known phylogeny of a group as shown by the fossil record and coupled with the ontogeny of the individual, as shown in its complete development, together with what may be learned of the morphology and physiology of the group." He assumes that the simplest forms were chitinous, and from these myxothecid forms (Rhumbler), the sand-encrusted types were evolved with, later on, hyaline modifications. We are inclined to reverse this sequence, though the appearance of the two groups, hyaline and arenaceous, was almost simultaneous, as *Spirillina* and *Lituotuba* have been found by us in the Cambrian.

In Cushman's second edition (1933), many genera described since 1928 were included, and changes were made in the position of some of the earlier genera.

Galloway (1928, p. 224) points out, in regard to the sequence of the calcareous and arenaceous forms respectively, that "many chitinous and calcareous forms, some of the Lagenidae, Miliolidae and Rotaliidae, show a tendency to develop an agglutinated test on the chitinous or calcareous base, but no known foraminifera have an arenaceous young stage followed by a calcareous stage in its ontogeny." The results of detailed work amongst fossil forms have convinced us that the calcareous and arenaceous foraminifera were primarily derived from chitinous types. Of these two groups the hyaline must have appeared first if the test were naturally moulded on the protoplasm. This seems to be supported by the fact that the oldest representatives of the foraminifera (Lower Cambrian, of Nuneaton, England, and the Baltic) are found in the form of glauconite casts or grains, with the hyaline test often still adhering to them.

Galloway (1933) adopted the principles enunciated by Cushman, but, as a result of his interpretation of the phylogeny, the classification differs very considerably from those in previous publications. He regards "the families as derived from similar, but more primitive ancestors, rather than from arenaceous or tubular, or other specialized or degenerate forms."

The present authors differ from Cushman by grouping the arenaceous after the perforate calcareous types. We have placed the whole order in three super-families, viz., the Allogromioidea (chitinous), the Spirillinoidea (hyaline or perforate types), and the Ammodiscoidea (arenaceous, porcellanous and subarenaceous forms).

A re-sorting of certain of Cushman's family groups has been made, and their number reduced where the generic relationships appear to warrant it. In any classification, the arrangement of families in sequence must be based on a more or less artificial plan, reticulated rather than divergent, as exemplified in the

same way in taxonomic arrangements of other groups of the animal kingdom. The inclusion of a larger number of genera within the family Rotaliidae is one of the more important changes. We have also regarded the family of the Nummulitidae as the most highly specialized of the foraminifera, in view of the complex canal system formed in the more highly developed genera. The genera constituting Cushman's sub-families Cassidulininae and Ehrenbergininae, in the family Cassidulinidae are here placed next to the Buliminidae, where it appears to us their affinities lie rather than in the Rotaliidae.

With a few minor exceptions, we have accepted the genera which Cushman has been at such pains to establish according to the rule of priority, but there are a few notable changes. The genus *Robulus* is merged into *Lenticulina*, on account of the inconstant character of the aperture. *Neusina*, *Jullienella* and *Rhaphidoscene* are omitted on account of their hydroid or spongoid affinities, whilst *Botellina*, formerly included in the family Neusinidae, here obliterated, is removed to the Rhizamminidae. In view of the constant stream of new genera still being published, it has been considered advisable to include only those which date to the end of 1934.

Order FORAMINIFERA.

Super-family ALLOGROMIOIDEA.

Family.	Sub-family.	Genus.	Time-range.
Fam. I.— ALLOGROMIIDAE	Myxothecinae ..	<i>Schultesia</i> Rhumbler, 1903 ..	Recent (Marine)
		<i>Myxotheca</i> Schaudinn, 1893 ..	Recent (Marine)
		<i>Bacteria</i> Strethill Wright, 1867 ..	Recent (Marine)
		<i>Plagiophrys</i> Claparède and Lachmann, 1859	Recent (Freshwater)
	Allogromiinae ..	<i>Dactylosaccus</i> Rhumbler, 1894 ..	Recent (Marine)
		<i>Allogromia</i> Rhumbler, 1903 ..	Recent (Marine)
		<i>Lieberkühnia</i> Claparède and Lachmann, 1859	Recent (Marine and Freshwater)
		<i>Shepherdella</i> Siddall, 1880 ..	Recent (Marine)
		<i>Rhynchosaccus</i> Rhumbler, 1894 ..	Recent (Marine)
		<i>Rhynchogramia</i> Rhumbler, 1894 ..	Recent (Marine and Freshwater)
		<i>Diphogramia</i> Rhumbler, 1903 ..	Recent (Freshwater)
		<i>Diapharodon</i> Archer, 1869 ..	Recent (Freshwater)
		<i>Amphitrema</i> Archer, 1870 ..	Recent (Freshwater)

Super-family SPIRILLINOIDEA (ALL MARINE).

Family.	Sub-family.	Genus.	Time-range.
Fam. II.— SPIRILLINIDAE	<i>Spirillina</i> Ehrenberg, 1843 ..	Cambrian—Recent
		<i>Archaeodiscus</i> Brady, 1873 ..	Carboniferous
		<i>Terebratina</i> Terquem, 1866 ..	Jurassic
		<i>Turrispirillina</i> Cushman, 1927 ..	Jurassic—Recent
		<i>Coniospirillina</i> Cushman, 1927 ..	Jurassic
		<i>Tracholina</i> Paalzow, 1922 ..	Jurassic
		<i>Paulzonella</i> Cushman, 1933 ..	Jurassic

Super-family SPIRILLINOIDEA (ALL MARINE)—continued.

Family.	Sub-family.	Genus.	Time-range.	
Fam. III.— NODOSARITIDAE	Nodosariinae ..	<i>Lenticulina</i> Lamarek, 1804 ..	Upper Cambrian—Recent	
		<i>Planularia</i> DeFrance, 1824 ..	Jurassic—Recent	
		<i>Hemicristellaria</i> Stache, 1864 ..	Jurassic—Recent	
		<i>Saracenaria</i> DeFrance, 1824 ..	Jurassic—Recent	
		<i>Marginulina</i> d'Orbigny, 1826 ..	Upper Cambrian—Recent	
		<i>Virgulinina</i> d'Orbigny, 1826 ..	Jurassic—Recent	
		<i>Denticulina</i> d'Orbigny, 1826 ..	Jurassic—Recent	
		<i>Nodosaria</i> Lamarek, 1812 ..	Upper Cambrian—Recent	
		<i>Chrysalogonima</i> Schubert, 1907 ..	Cretaceous—Pliocene	
		<i>Pseudoglandulata</i> Cushman, 1929 ..	Jurassic—Recent	
		<i>Flabellina</i> d'Orbigny, 1839 ..	Jurassic—Recent	
		<i>Kyphopyra</i> Cushman, 1929 ..	Cretaceous	
		<i>Frondeularia</i> DeFrance, 1824 ..	Permian—Recent	
		<i>Geinitzina</i> Spandel, 1901 ..	Carboniferous and Permian	
		<i>Flabellinella</i> Schubert, 1907 ..	Upper Cretaceous	
		<i>Lingulina</i> d'Orbigny, 1826 ..	Permian—Recent	
		<i>Amphicaryne</i> Schlumberger, 1881 ..	Tertiary—Recent	
	Lageninae ..	<i>Lagena</i> Walker and Jacob, 1798 (vel <i>Entosolenia</i> , Ehrenberg, 1848)	? Upper Cambrian; Jurassic—Recent	
	Fam. IV.— POLY-MORPHINIDAE	Polymorphininae	<i>Eoguttulina</i> Cushman and Ozawa, 1930	Jurassic—Cretaceous
			<i>Quadrulina</i> Cushman and Ozawa, 1930	Jurassic—Cretaceous
<i>Guttulina</i> d'Orbigny, 1826 (subgenus <i>Sigmoidina</i> Cushman and Ozawa, 1928)			Jurassic—Recent	
<i>Pyritina</i> d'Orbigny, 1826 ..			Cretaceous—Recent	
<i>Globulina</i> d'Orbigny, 1826 ..			Cretaceous—Recent	
<i>Dimorphina</i> d'Orbigny, 1826 ..			Eocene—Lower Pliocene	
<i>Pseudopolymorphina</i> Cushman and Ozawa, 1928			Cretaceous—Recent	
<i>Palaepolymorphina</i> Cushman and Ozawa, 1930			Cretaceous	
<i>Polymorphina</i> d'Orbigny, 1826 ..			Eocene—Recent	
<i>Sigmomorphina</i> Cushman and Ozawa, 1928			Eocene—Recent	
<i>Sigmoidella</i> Cushman and Ozawa, 1928		Eocene—Recent		
Ramulininae ..		<i>Glandulina</i> d'Orbigny, 1826 .. <i>Ramulina</i> Rupert Jones, 1875 .. <i>Vitrebina</i> Chapman, 1892 ..	Tertiary—Recent Jurassic—Recent Cretaceous—Eocene	
Fam. V.— BULIMINIDAE		Turrilinae ..	<i>Turrilina</i> Andreae, 1884 (emend. Cushman, 1928)	Jurassic—Recent
	<i>Buliminella</i> Cushman, 1911 ..		Cretaceous—Recent	
	<i>Buliminoides</i> Cushman, 1911 ..		Recent	
	Bulimininae ..	<i>Robertina</i> d'Orbigny, 1846 ..	Recent	
		<i>Bulimina</i> d'Orbigny, 1826 .. <i>Neobulimina</i> Cushman and Wicken- den, 1928	Jurassic—Recent Cretaceous	
	Virgulinae ..	<i>Globobulimina</i> Cushman, 1927 ..	Tertiary—Recent	
		<i>Virgulina</i> d'Orbigny, 1826 (subgenus <i>Virgulinella</i> Cushman, 1932)	Lower Cretaceous—Recent	
		<i>Bolivina</i> d'Orbigny, 1839 ..	Cretaceous—Recent	
		<i>Rectobolivina</i> Cushman, 1927 ..	Tertiary—Recent	
		<i>Larostomum</i> Ehrenberg, 1854 ..	Cretaceous—Recent	
	Reussellinae ..	<i>Tubulogenerina</i> Cushman, 1927 ..	Eocene—Miocene	
		<i>Bifurina</i> Parker and Jones, 1872 ..	Cretaceous—Recent	
		<i>Schubertia</i> A. Silvestri, 1911 ..	Tertiary and Recent	
		<i>Reussella</i> Galloway, 1933 ..	Cretaceous—Recent	
		<i>Mimosina</i> Millett, 1900 ..	Recent	
		<i>Triniasina</i> Cushman, 1927 ..	Recent	
	Uvigerininae ..	<i>Paronina</i> d'Orbigny, 1826 ..	Oligocene—Recent	
<i>Chrysalidina</i> Schubert, 1907 ..		Miocene—Recent		
<i>Uvigerinella</i> Cushman, 1926 ..		Miocene—Recent		
<i>Uvigerina</i> d'Orbigny, 1826 ..		Eocene—Recent		
<i>Hopkinsina</i> Howe and Wallace, 1933 <i>Siphogenerina</i> Schlumberger, 1883		Eocene—Recent		

Super-family SPIRILLINOIDEA (ALL MARINE)—*continued.*

Family.	Sub-family.	Genus.	Time-range.	
Fam. IX.— ROTALLIDAE— <i>continued.</i>	Rotalline— <i>—continued.</i>	<i>Pulvinulinella</i> Cushman, 1926 ..	Cretaceous—Recent	
		<i>Rotalia</i> Lamarck, 1804 ..	Cretaceous—Recent	
		<i>Loekhartia</i> L. M. Davies, 1932 ..	Eocene	
	Pegidiinae ..	<i>Dietyconoides</i> Nuttall, 1925 ..	Eocene	
		<i>Rugidia</i> Heron-Allen and Earland, 1928 ..	Recent	
		<i>Pegidia</i> Heron-Allen and Earland, 1928 ..	Miocene—Recent	
		<i>Sphaecidia</i> Heron-Allen and Earland, 1928 ..	Recent	
		<i>Physalidia</i> Heron-Allen and Earland, 1928 ..	Recent	
	Siphonininae ..	<i>Epistomina</i> Terquem, 1883 ..	Jurassic—Recent	
		<i>Epistominaoides</i> Plummer, 1934 ..	Eocene	
		<i>Epistomaria</i> Galloway, 1933 ..	Eocene—Recent	
		<i>Mississippiina</i> Howe, 1930 ..	Lower Oligocene—Recent	
		<i>Calceus</i> Plummer, 1934 ..	Eocene	
		<i>Siphonina</i> Reuss, 1849 ..	Cretaceous—Recent	
		<i>Siphonamides</i> Cushman, 1927 ..	Tertiary—Recent	
	Baggiuinae ..	<i>Siphoninella</i> Cushman, 1927 ..	Eocene—Recent	
		<i>Caneris</i> Montfort, 1808 ..	Tertiary—Recent	
	Cibicidinae ..	<i>Baggina</i> Cushman, 1926 ..	Miocene—Recent	
		<i>Necocibicella</i> Cushman, 1928 ..	Eocene	
		<i>Anomalina</i> d'Orbigny, 1826 ..	Lower Cretaceous—Recent	
		<i>Planulina</i> d'Orbigny, 1826 ..	Cretaceous—Recent	
		<i>Laticarinina</i> Galloway and Wissler, 1928 ..	Eocene—Recent	
		<i>Anomalinella</i> Cushman, 1927 ..	? Miocene—Recent	
		<i>Cibicides</i> Montfort, 1808 ..	Cretaceous—Recent	
		<i>Rectocibicides</i> Cushman and Ponton, 1932 ..	Miocene—Recent	
		<i>Dyocibicides</i> Cushman and Valentine, 1930 ..	Miocene—Recent	
		<i>Cylocibicides</i> Cushman, 1927 ..	Recent	
		<i>Anulocibicides</i> Cushman and Ponton, 1932 ..	Miocene	
		<i>Cibicidella</i> Cushman, 1927 ..	Recent	
		<i>Webbia</i> d'Orbigny, 1839 (cf. <i>Placopsium</i> Rumbler, 1913) ..	Recent	
		Planorbulininae	<i>Planorbulina</i> d'Orbigny, 1826 ..	Eocene—Recent
			<i>Planorbulinoides</i> Cushman, 1928 ..	Recent
	<i>Planorbulinella</i> Cushman, 1927 ..		Eocene—Recent	
	<i>Lindicina</i> Schumberger, 1893 ..		Upper Eocene	
	<i>Vancouverina</i> Palmer, 1934 ..		Upper Cretaceous	
	<i>Chapmanina</i> A. Silvestri, 1931 ..		Eocene	
	<i>Paikyardia</i> Heron-Allen and Earland, 1919 ..		Eocene—Lower Miocene	
	(The position of the four preceding genera is uncertain, and they may belong to the Orbitoididae.)			
	Rupertiinae ..	<i>Acerulina</i> Schultze, 1854 ..	Oligocene—Recent	
		<i>Gypsina</i> Carter, 1877 ..	Cretaceous—Recent	
		<i>Rupetia</i> Wallich, 1877 ..	Eocene—Recent	
		<i>Carpenteria</i> Gray, 1858 ..	Cretaceous—Recent	
		<i>Eurupertia</i> Yabe and Hanzawa, 1927 ..	Eocene	
	Homotremiinae ..	<i>Victoriella</i> Chapman and Crespin, 1930 ..	Oligocene—Lower Miocene	
		<i>Hofkerina</i> Chapman and Parr, 1931 ..	Lower Miocene	
		<i>Homotrema</i> Hickson, 1911 ..	Recent	
	Amphistegininae	<i>Sporadotrema</i> Hickson, 1911 ..	Lower Miocene—Recent	
<i>Menzarina</i> Galloway, 1933 ..		Lower Miocene—Recent		
<i>Asterigerina</i> d'Orbigny, 1839 ..		Eocene—Recent		
Calcarininae ..	<i>Amphistegina</i> d'Orbigny, 1826 ..	Eocene—Recent		
	<i>Calcarina</i> d'Orbigny, 1826 ..	Cretaceous—Recent		
	<i>Siderolites</i> Lamarck, 1801 ..	Cretaceous—Recent		
	<i>Baculogypsinoides</i> Yabe and Hanzawa 1930 ..	Eocene—Recent		
	<i>Pellatispira</i> Boussac, 1906 ..	Eocene		
<i>Baculogypsina</i> Sacco, 1893 ..	Upper Miocene—Recent			
<i>Arnaudicella</i> H. Douvillé, 1907 ..	Uppermost Cretaceous			

Super-family SPIRILLINOIDEA (ALL MARINE)—continued.

Family.	Sub-family.	Genus.	Time-range.	
Fam. X.— CHILOSTO- MELLIDAE	Chilostomellinae	<i>Allomorphina</i> Reuss, 1850 ..	Upper Cretaceous—Recent	
		<i>Chilostomella</i> Reuss, 1850 ..	Upper Cretaceous—Recent	
		<i>Chilostomelloides</i> Cushman, 1926 ..	Upper Cretaceous—Miocene	
	Seabrookiinae ..	<i>Seabrookia</i> Brady, 1890 ..	Recent	
		Allomorphinellinae	<i>Allomorphinella</i> Cushman, 1927 ..	Upper Cretaceous
			<i>Chilostomellina</i> Cushman, 1926 ..	Recent
		<i>Pullenia</i> Parker and Jones, 1862 ..	Cretaceous—Recent	
	Sphaeroidininae	<i>Sphaeroidina</i> d'Orbigny, 1826 ..	Cretaceous—Recent	
Fam. XI.— ORBULINIDAE	Globigerininae ..	<i>Globigerina</i> d'Orbigny, 1826 ..	Cretaceous—Recent	
		<i>Globigerinoides</i> Cushman, 1927 ..	Tertiary—Recent	
		<i>Globigerinella</i> Cushman, 1927 ..	Cretaceous—Recent	
		<i>Hastigerina</i> Wyville Thomson, 1876 ..	Miocene—Recent	
		<i>Hastigerinella</i> Cushman, 1927 ..	Upper Cretaceous—Recent	
	Orbulininae ..	<i>Orbulina</i> d'Orbigny, 1826 ..	Tertiary—Recent	
		Pulleniatininae	<i>Pulleniatina</i> Cushman, 1927 ..	Oligocene—Recent
			<i>Sphaeroidiella</i> Cushman, 1927 ..	Eocene—Recent
	Candeininae ..	<i>Candeina</i> d'Orbigny, 1839 ..	Late Tertiary—Recent	
	Hantkenininae	<i>Scharckina</i> Thalman, 1932 ..	Upper Cretaceous	
		<i>Hantkenina</i> Cushman, 1924 ..	Middle and Upper Eocene	
	Globorotalinae	<i>Globorotalina</i> Cushman, 1927 ..	Upper Cretaceous—Recent	
		<i>Globocollina</i> Cushman, 1927 ..	Upper Cretaceous—Recent	
		<i>Cyclobaculina</i> Heron-Allen and Earland, 1908 ..	Eocene	
		<i>Shorbornana</i> Chapman, 1922 ..	Lower Miocene	
Fam. XII.— ORBITOIDIDAE	Lepidorbitoidinae	<i>Monolepidorbis</i> Astre, 1927 ..	Upper Cretaceous	
		<i>Lepidorbitoides</i> A. Silvestri, 1907 ..	Upper Cretaceous	
	Orbitoidinae ..	<i>Clypeorbis</i> H. Douvillé, 1915 ..	Upper Cretaceous	
		<i>Orbitoides</i> d'Orbigny, 1847 ..	Upper Cretaceous	
		<i>Simplorbites</i> de Gregorio, 1882 ..	Upper Cretaceous	
		<i>Artinosiphon</i> Vaughan, 1929 ..	Lower Eocene	
		<i>Pseudorbitoides</i> H. Douvillé, 1922 ..	Upper Cretaceous	
		<i>Orbitocyclina</i> Vaughan, 1929 ..	Upper Cretaceous	
		<i>Asterorbis</i> Vaughan and Cole, 1932 ..	Upper Cretaceous	
		<i>Lepidocyclina</i> Gumbel, 1868 ..	Middle Eocene—Middle Miocene	
			<i>S.G. Polytepidina</i> , Vaughan, 1924 ..	Middle and Upper Eocene
			<i>S.G. Multitepidina</i> Hanzawa, 1932 ..	Lower Miocene
		<i>S.G. Pliotepidina</i> H. Douvillé, 1915 ..	Upper Eocene	
		<i>S.G. Lepidocyclina</i> Gumbel, 1868 ..	Upper Eocene—Lower Miocene	
		<i>S.G. Nephrolepidina</i> H. Douvillé, 1911 ..	Upper Eocene—Middle Miocene	
		<i>S.G. Eutepidina</i> H. Douvillé, 1911 ..	Middle Oligocene—Lower Miocene	
	Omphalocyclinae	<i>Omphalocyclus</i> Broun, 1852 ..	Upper Cretaceous	
		Miogypsininae ..	<i>Miogypsina</i> Sacco, 1893 ..	Oligocene—Pliocene
		<i>Miogypsinoides</i> Yabe and Hanzawa, 1928 ..	Lower Miocene	
Discocyclininae	<i>Heterolepidina</i> Tobler, 1922 ..	Upper Eocene		
	<i>Discocyclina</i> Gumbel, 1868 ..	Upper Cretaceous (Danian)—Upper Eocene		
	<i>S.G. Aktinocyclina</i> Gumbel, 1863 ..	Middle and Upper Eocene		
	<i>S.G. Asterocyclina</i> Gumbel, 1868 ..	Middle and Upper Eocene		
		(vel <i>Orthocyclina</i> van der Vlerk, 1923)		
Fam. XIII.— NUMMULITIDAE	Nonioninae ..	<i>Nonion</i> Montfort, 1808 ..	Jurassic—Recent	
		<i>Nonionella</i> Cushman, 1926 ..	Cretaceous—Recent	
		<i>Elphidina</i> Montfort, 1808 ..	Jurassic—Recent	
		<i>Polystomellina</i> Yabe and Hanzawa, 1923 ..	Tertiary—Recent	
	Nummulitinae ..	<i>Faujasina</i> d'Orbigny, 1839 ..	Cretaceous—Recent	
		<i>Nummulites</i> Lamarck, 1801 ..	Eocene—Oligocene	
		<i>Assilina</i> d'Orbigny, 1826 ..	Eocene	
		<i>Operculinella</i> Yabe, 1918 ..	Lower Miocene—Recent	
		<i>Operculina</i> d'Orbigny, 1826 ..	Lower Cretaceous—Recent	
		<i>Heterostegina</i> d'Orbigny, 1826 ..	Eocene—Recent	
	<i>Spiroclypeus</i> H. Douvillé, 1905 ..	Lower Miocene		
	<i>Heteroclypeus</i> Schubert, 1906 ..	Tertiary		
	<i>Cycloclypeus</i> Carpenter, 1856 ..	Eocene—Recent.		

Super-family AMMODISCOIDEA (ALL MARINE except the genus *Entzia*, which occurs in salt pools of Hungary).

Family.	Sub-family.	Genus.	Time-range.
Fam. XIV.— AMMODISCOIDAE	Ammodiscinae	<i>Ammodiscus</i> Reuss, 1861 ..	Silurian—Recent
		<i>Hemidiscus</i> Schellwien, 1898 ..	Carboniferous—Recent
		<i>Turrillella</i> Rhumbler, 1903 ..	Carboniferous—Recent
		<i>Howchinia</i> Cushman, 1927 ..	Carboniferous
		<i>Ammodiscoides</i> Cushman, 1909 ..	Carboniferous—Recent
		<i>Glomospira</i> Kzevak, 1888 ..	Carboniferous—Recent
	Tolypammininae	<i>Litvoluta</i> Rhumbler, 1895 ..	Cambrian—Recent
		<i>Psammomyx</i> Döderlein, 1892 ..	Recent
		<i>Tolypammina</i> Rhumbler, 1895 ..	Carboniferous—Recent
		<i>Ammocertella</i> Cushman 1928 ..	Carboniferous—Jurassic
		<i>Ammolagena</i> Biner and Fickert, 1899 ..	Carboniferous—Recent
		<i>Trepelopsis</i> Cushman and Waters, 1928 ..	Carboniferous
		Fam. XV.— HYPERAMMINIDAE	Hyperammininae
<i>Hyperamminoides</i> Cushman and Waters, 1928 ..	Upper Carboniferous		
<i>Earlandia</i> Plummer, 1930 ..	Upper Carboniferous		
<i>Jaculella</i> Brady, 1879 ..	Miocene—Recent		
<i>Hippocrepina</i> Parker, 1870 ..	Upper Carboniferous, Pliocene—Recent		
Dendrophryinae	<i>Nubeculariella</i> Awerinzew, 1911 ..		Recent
	<i>Normania</i> Cushman, 1928 ..		Recent
	<i>Saccophiza</i> Elmer and Fickert, 1899 ..		Jurassic—Recent
	<i>Dendrophrya</i> Strehill Wright, 1861 ..		Cretaceous—Recent
	<i>Deudronia</i> Heron-Allen and Earland, 1922 ..		Recent
	<i>Haliophysema</i> Bowerbank, 1862 ..		Recent
	<i>Sagetina</i> Chapman, 1900 ..		Eocene—Recent
	<i>Psammotodendron</i> Norman, 1881 ..		Recent
Fam. XVI.— SACCAMMINIDAE	Psammospharinae	<i>Psammospaera</i> F. E. Schulze, 1875 ..	Silurian—Recent
		<i>Blastammina</i> Eisenack, 1932 ..	Silurian
		<i>Sorosphaera</i> Brady, 1879 ..	Silurian—Recent
		<i>Psammophax</i> Rhumbler, 1931 ..	Recent
		<i>Storthospaera</i> F. E. Schulze, 1875 ..	Middle Oligocene—Recent
	Saccammininae	<i>Saccammina</i> M. Sars, 1869 ..	Recent
		<i>Proromina</i> Williarson, 1858 ..	Carboniferous—Recent
		<i>Brachysiphon</i> Chapman, 1906 ..	Recent
		<i>Lagenammina</i> Rhumbler, 1911 ..	Silurian—Recent
		<i>Lagunculina</i> Rhumbler, 1903 ..	Recent
		<i>Millettella</i> Rhumbler, 1903 ..	Miocene—Recent
		<i>Marsupulina</i> Rhumbler, 1903 ..	Recent
		<i>Urnulina</i> Gruber, 1884 ..	Miocene—Recent
<i>Pseudarcella</i> Spandel, 1909 ..		Oligocene and Miocene	
<i>Ammospharoides</i> Cushman, 1910 ..		Recent	
Pelosininae ..	<i>Thurammina</i> Brady, 1879 ..	Silurian—Recent	
	<i>Pelosina</i> Brady, 1879 ..	Carboniferous—Recent	
	<i>Teehaitella</i> Norman, 1878 ..	Recent	
	<i>Pilulina</i> Carpenter, 1870 ..	Recent	
	<i>Protobotellina</i> Heron-Allen and Earland, 1929 ..	Recent	
Webbinellinae ..	<i>Webbinella</i> Rhumbler, 1903 ..	Carboniferous—Recent	
	<i>Colonammina</i> Moreman, 1930 ..	Lower Palaeozoic, America	
	<i>Thobstina</i> Rhumbler, 1895 ..	Silurian—Recent	
	<i>Verrucina</i> Goes, 1896 ..	Recent	
	<i>Urnula</i> Wicner, 1931 ..	Recent	
Fam. XVII.— RHIZAMMINIDAE	Rhizammininae	<i>Rhizammina</i> Brady, 1879 ..	Cretaceous—Recent
		<i>Marsipella</i> Norman, 1878 ..	Jurassic—Recent
		<i>Bathysiphon</i> M. Sars, 1872 ..	Silurian, Cretaceous—Recent
		<i>Hippocrepinella</i> Heron-Allen and Earland, 1932 ..	Recent
	Botellininae ..	<i>Botellina</i> Carpenter, 1869 ..	Recent
		<i>Schizammmina</i> Heron-Allen and Earland, 1929 ..	Recent

Super-family AMMODISCOIDEA—continued.

Family.	Sub-family.	Genus.	Time-range.
Fam. XVIII.— ASTORRHIZIDÆ	<i>Astrorhiza</i> Sandahl, 1858 ..	Jurassic—Recent
		<i>Pseudastrorhiza</i> Eisenack, 1932 ..	Silurian
		<i>Masonella</i> Brady, 1889 ..	Recent
		<i>Rhodammina</i> M. Sars, 1869 ..	Jurassic—Recent
		<i>Grithionina</i> Gœb., 1894 ..	Silurian—Recent
		<i>Iridia</i> Heron-Allen and Earland, 1914 ..	Eocene (?)—Recent
		<i>Vanhoeffenella</i> Rhumbler, 1905 ..	Recent
		<i>Astrammina</i> Rhumbler, 1931 ..	Recent
		<i>Armarella</i> Heron-Allen and Earland, 1932 ..	Recent
		<i>Pelospaera</i> Heron-Allen and Earland, 1932 ..	Recent
		Fam. XIX.— OPHTHALMIDIIDÆ	Cornuspirinae ..
<i>Reolocornuspira</i> Warthin, 1930 ..	Upper Carboniferous		
<i>Vidalina</i> Schlumberger, 1899 ..	Cretaceous		
<i>Hemigordius</i> Schubert, 1908 ..	Upper Carboniferous—Permian		
<i>Gordiaspira</i> Heron-Allen and Earland, 1932 ..	Recent		
<i>Orthoretella</i> , Cushman and Waters, 1928 ..	Upper Carboniferous		
<i>Calcitornella</i> Cushman and Waters, 1928 ..	Upper Carboniferous—Permian		
<i>Calcivertella</i> Cushman and Waters, 1928 ..	Upper Carboniferous		
<i>Plummerinella</i> Cushman and Waters, 1928 ..	Upper Carboniferous		
<i>Apterrinella</i> Cushman and Waters, 1928 ..	Upper Carboniferous		
<i>Cornuspiramia</i> Cushman, 1928 ..	Recent		
<i>Cornuspirella</i> Cushman, 1928 ..	Recent		
<i>Cornuspiroides</i> Cushman, 1928 ..	Recent		
<i>Nodobacularia</i> Rhumbler, 1895 ..	Lias—Recent		
<i>Vertebalina</i> d'Orbigny, 1826 ..	Eocene—Recent		
<i>Ophthalmosidum</i> Zwingli and Kübler, 1870 ..	Jurassic—Recent		
<i>Spirophthalmidium</i> Cushman, 1927 ..	Jurassic—Recent		
<i>Discospirina</i> Munier-Chalmas, 1902 ..	Tertiary—Recent		
<i>Planispirina</i> Seguenza, 1880 ..	Cretaceous—Recent		
<i>Remolina</i> Lamarck, 1804 ..	Eocene		
<i>Planispirinella</i> Wiesner, 1931 ..	Miocene—Recent		
<i>Wiesnerella</i> Cushman 1933 ..	Recent		
<i>Trisegmentina</i> Wiesner, 1931 ..	Recent		
<i>Nubecularia</i> DeFrance, 1825 ..	Jurassic—Recent		
<i>Nubeculinella</i> Cushman, 1929 ..	Jurassic		
<i>Sinzowella</i> Cushman, 1933 ..	Miocene		
<i>Colectuba</i> Roboz, 1884 ..	Recent		
<i>Parrina</i> Cushman, 1931 ..	Recent		
Fam. XX.— MILIOLIDÆ	<i>Agathammina</i> Neumayr, 1887 ..	Carboniferous—Jurassic
		<i>Quaquebuculina</i> d'Orbigny, 1826 ..	Carboniferous—Recent
		<i>Massilina</i> Schlumberger, 1893 ..	Lower Cretaceous—Recent
		<i>Spirolaculina</i> d'Orbigny, 1826 ..	Jurassic—Recent
		<i>Siphoilina</i> Schlumberger, 1887 ..	Tertiary—Recent
		<i>Nansanloculina</i> Steinmann, 1881 ..	Jurassic—Recent
		<i>Articulina</i> d'Orbigny, 1826 ..	Lower Eocene—Recent
		<i>Tubinella</i> Rhumbler, 1906 ..	Lower Miocene—Recent
		<i>Nubeculina</i> Cushman, 1924 ..	Recent
		<i>Ptychomiliola</i> Eimer and Fickert, 1899 ..	Recent
		<i>Miliola</i> Lamarck, 1804 ..	Eocene—Lower Miocene
		<i>Heterillina</i> Munier-Chalmas and Schlumberger, 1905 ..	Upper Eocene—Oligocene
		<i>Hauerina</i> d'Orbigny, 1839 ..	Eocene—Recent
		<i>Schlumbergerina</i> Munier-Chalmas, 1882 ..	Late Tertiary—Recent
		<i>Ammonassilina</i> Cushman, 1933 ..	Recent
		<i>Tribuculina</i> d'Orbigny, 1826 ..	Triassic—Recent
		<i>Trillina</i> Munier-Chalmas, 1882 ..	Eocene—Lower Miocene
		<i>Platina</i> Cushman, 1921 ..	Recent
		<i>Pyrgo</i> DeFrance, 1824 ..	Jurassic—Recent
		<i>Fabularia</i> DeFrance, 1820 ..	Eocene—Lower Pliocene

Super-family AMMODISCOIDEA—continued.

Family.	Sub-family.	Genus.	Time-range.
Fam. XX.— MILIOLIDAE— continued.	<i>Flintia</i> Schubert, 1911 <i>Neritina</i> Sichelottou, 1905 <i>Idalina</i> Munier-Chalmas and Schlumberger, 1884 <i>Periloculina</i> Munier-Chalmas and Schlumberger, 1885 <i>Lacuzina</i> Munier-Chalmas, 1882	Tertiary—Recent Recent Upper Cretaceous Upper Cretaceous Upper Cretaceous
Fam. XXI.— FISCHERINIDAE	<i>Fischerina</i> Terquem, 1878	Pliocene—Recent
Fam. XXII.— SORITIDAE	Peneroplinae Archaiasinae Orbitolitinae	<i>Peneroplis</i> Montfort, 1808 <i>Dendritina</i> d'Orbigny, 1826 <i>Sporolium</i> Lamarck, 1804 <i>Monalysidium</i> Chapman, 1900 <i>Archaias</i> Montfort, 1808 <i>Fallotia</i> H. Douvillé, 1902 <i>Orbitolites</i> Lamarck, 1801 <i>Operorbitalites</i> Nuttall, 1925 <i>Ampisacus</i> Ehrenberg, 1840 <i>Sorites</i> Ehrenberg, 1840 <i>Maryinopora</i> Blainville, 1830 Genera of doubtful relationships <i>Craterites</i> Heron-Allen and Earland, 1924 <i>Broeckina</i> Munier-Chalmas, 1882 <i>Megadropsina</i> Munier-Chalmas, 1899 <i>Pruesorites</i> H. Douvillé, 1902 <i>Rhaphidionina</i> Stache, 1912 <i>Rhpidionina</i> Stache, 1912	Eocene—Recent Eocene—Recent Eocene—Recent Recent Miocene—Recent Upper Cretaceous Eocene Eocene Oligocene—Recent Miocene—Recent Late Tertiary—Recent Recent Upper Cretaceous Upper Cretaceous Upper Cretaceous Lower Eocene Lower Eocene
Fam. XXIII.— ALVEOLINEL- LIDAE	<i>Borelis</i> Montfort, 1808 <i>Fascioides</i> Parkinson, 1811 <i>Floesulina</i> Stache, 1883 <i>Floesulinella</i> Schubert, 1910 <i>Alveolinella</i> H. Douvillé, 1906	Eocene—Recent Cretaceous—Miocene Eocene Oligocene—Miocene Upper Miocene—Recent
Fam. XXIV.— KERAMO- SPHAERIDAE	<i>Keramosphaera</i> Brady, 1882	Recent
Fam. XXV.— SILICINIDAE	Siliciniinae Rzehakininae	<i>Silicina</i> Bornemann, 1874 <i>Luculina</i> Terquem, 1862 <i>Problematica</i> Bornemann, 1874 <i>Rzehakina</i> Cushman, 1927 <i>Silicosignolina</i> Cushman and Church, 1929 <i>Milammium</i> Heron-Allen and Ear- land, 1930 <i>Spirolocummina</i> Earland, 1934	Lias Jurassic Jurassic Upper Cretaceous— Eocene Upper Cretaceous Recent Recent
Fam. XXVI.— LITUOLIDAE	Endothyriinae Haplophrag- miinae	<i>Endothyra</i> Phillips, 1846 <i>Bradyina</i> Möller, 1878 <i>Glyphostomella</i> Cushman and Waters, 1928 <i>Cribraspira</i> Möller, 1878 <i>Endathyrella</i> Calloway and Har- ton, 1930 <i>Ammofitina</i> Earland, 1934 <i>Trochamminoides</i> Cushman, 1910 <i>Haplophragmoides</i> Cushman, 1910 <i>Recurvabiles</i> Earland, 1934 <i>Orbitana</i> Hagenow, 1842 <i>Cribrostomoides</i> Cushman, 1910 <i>Ammosyringulina</i> Wiesner, 1931 <i>Ammobaculides</i> Cushman, 1910 <i>Phelammina</i> Cushman, 1928 <i>Frankina</i> Cushman and Alexander, 1923 <i>Triplasia</i> Reuss, 1854 <i>Haplophragmium</i> Reuss, 1860	Carboniferous—Trias Carboniferous Upper Carboniferous Carboniferous Carboniferous Recent Carboniferous—Recent Carboniferous—Recent Recent Cretaceous Cretaceous—Recent Cretaceous—Recent Carboniferous—Recent Cretaceous Cretaceous Cretaceous—Recent

Super-family AMMODISCOIDEA—continued.

Family.	Sub-family.	Genus.	Time-range.
Fam. XXVI.— LITUOLIDAE— continued.	Lituolinae ..	<i>Discammima</i> Lacroix, 1932 ..	Recent
		<i>Cyclammima</i> Brady, 1876 ..	Cretaceous—Recent
		<i>Pseudocyclammima</i> Yabe and Hanzawa, 1926 ..	Cretaceous
		<i>Choffarella</i> Schunberger, 1904 ..	Jurassic and Cretaceous
		<i>Dictyopsella</i> Munier-Chalmas, 1899 ..	Upper Cretaceous
		<i>Yabertinella</i> Vaughan, 1928 ..	Middle Eocene
		<i>Lituola</i> Lamarek, 1804 ..	Carboniferous—Recent
		<i>Spirocyclina</i> Munier-Chalmas, 1887 ..	Upper Jurassic—Cretaceous
		<i>Cyclotina</i> d'Orbigny, 1846 ..	Cretaceous
	Placopsilininae ..	<i>Orbitopsella</i> Munier-Chalmas, 1902 ..	Jurassic
		<i>Cyclopsinella</i> Galloway, 1933 ..	Upper Cretaceous
		<i>Placopsilina</i> d'Orbigny, 1850 ..	Silurian—Recent
		<i>Placopsilinella</i> Earland, 1934 ..	Recent
		<i>Bellonidina</i> Carter, 1877 ..	Jurassic—Recent
		<i>Diffusilina</i> Heron-Allen and Earland, 1924 ..	Recent
	Polyphragminae	<i>Haldonia</i> Chapman, 1898 ..	Recent
		<i>Polyphragma</i> Reuss, 1871 ..	Cretaceous
		<i>Stylobina</i> Karrer, 1877 ..	Miocene
<i>Stacheia</i> Brady, 1876 ..		Carboniferous—Jurassic	
Fam. XXVII.— LOFTUSIIDAE	..	<i>Loftusia</i> Brady, 1869 ..	Upper Cretaceous
Fam. XXVIII.— REOPHACIDAE	Nodosinellinae ..	<i>Nodosinella</i> Brady, 1876 ..	Carboniferous — Cretaceous
		<i>Succaminopsis</i> Sollas, 1921 ..	Ordovician — Carboniferous
	Reophacinae ..	<i>Reophax</i> Montfort, 1808 ..	Cambrian—Recent
		<i>Sulcophax</i> Rhumbler, 1911 ..	Recent
		<i>Hormosina</i> Brady, 1879 ..	Jurassic—Recent
		<i>Haplostiche</i> Reuss, 1861 ..	Carboniferous (?), Jurassic—Recent
	Aschemonellinae	<i>Kalamopsis</i> de Folin, 1883 ..	Recent
		<i>Turriclavina</i> Rhumbler, 1911 ..	Recent
		<i>Nobelina</i> Rhumbler, 1913 ..	Cretaceous—Recent
		<i>Aschemonella</i> Brady, 1879 ..	Cretaceous—Recent
	Sphaeramininae	<i>Sphaeraminina</i> Cushman, 1910 ..	Recent
		<i>Ammosphaerulina</i> Cushman, 1912 ..	Recent
Fam. XXIX.— TEXTU- LARIDAE	..	<i>Spiroplectammina</i> Cushman, 1927 ..	Upper Carboniferous—Recent
		<i>Ammospirata</i> Cushman, 1933 ..	Lower Oligocene—Recent
		<i>Annabucaloides</i> Plummer, 1932 ..	Upper Cretaceous
		<i>Textularia</i> DeFrance, 1824 ..	Cambrian—Recent
		<i>Textularioides</i> Cushman, 1911 ..	Recent
		<i>Bignacrina</i> d'Orbigny, 1826 ..	Upper Carboniferous—Recent
		<i>Vulvulina</i> d'Orbigny, 1826 ..	Eocene—Recent
		<i>Deckerella</i> Cushman and Waters, 1928 ..	Upper Carboniferous
		<i>Cribrostomum</i> Möller, 1879 ..	Carboniferous—Permian
		<i>Olinacammima</i> Brady, 1873 ..	Carboniferous—Permian
Fam. XXX.— TROCHAM- MINIDAE	Trochammininae	<i>Trochammina</i> Parker and Jones, 1859 ..	Carboniferous—Recent
		<i>Rotalummina</i> Cushman, 1924 ..	Recent
		<i>Ammocibicides</i> Earland, 1934 ..	Eocene; Recent
		<i>Entzia</i> Daday, 1883 ..	Recent, salt pools of Hungary
	Globotextulariinae	<i>Cavertina</i> Brady, 1884 ..	Recent
		<i>Globotextularia</i> Elmer and Fickert, 1899 ..	Recent
	Ammosphaeroidininae	<i>Mooreella</i> Cushman and Waters, 1928 ..	Upper Carboniferous
		<i>Ammosphaerulina</i> Cushman, 1910 ..	Recent
		<i>Cystammima</i> Neumayr, 1889 ..	Recent
		<i>Nouria</i> Heron-Allen and Earland, 1914 ..	Eocene; Recent

Super-family AMMODISCOIDEA—continued.

Family.	Sub-family.	Genus.	Time-range.	
Fam. XXXI.— VALVULINIDAE	Tetrataxinae ..	<i>Globivalvulina</i> Schubert, 1920 ..	Carboniferous—Permian	
		<i>Tetrataxis</i> Ehrenberg, 1843 ..	Carboniferous—Permian	
	<i>Polytaxis</i> Cushman and Waters, 1928 ..	Carboniferous		
	Valvulininae ..	<i>Ruditaxix</i> Schubert, 1920 ..	Carboniferous—Permian	
		<i>Valvulinella</i> Schubert, 1907 ..	Carboniferous	
		<i>Valvulina</i> d'Orbigny, 1826 ..	Jurassic—Recent	
		<i>Clavulina</i> d'Orbigny, 1826 ..	Cretaceous—Recent	
		<i>Cribrobulimina</i> Cushman, 1927 ..	Tertiary—Recent	
		<i>Arenobulimina</i> Cushman, 1927 ..	Cretaceous—Recent	
		<i>Eggerella</i> Cushman, 1933 ..	Cretaceous—Recent	
		<i>Chrysalidina</i> d'Orbigny, 1839 ..	Cretaceous	
		<i>Marssonella</i> Cushman, 1933 ..	Cretaceous—Recent	
		<i>Dorothia</i> Plummer, 1931 ..	Cretaceous—Recent	
		<i>Plectina</i> Marsson, 1878 ..	Cretaceous—Recent	
		<i>Goossella</i> Cushman, 1933 ..	Recent	
		<i>Martinotiella</i> Cushman, 1933 ..	Upper Cretaceous—Recent	
		<i>Valvulinina</i> Cushman, 1933 ..	Eocene	
		<i>Karrerella</i> Cushman, 1933 ..	Eocene—Recent	
		<i>Listerella</i> Cushman, 1933 ..	Eocene—Recent	
		<i>Tectulariella</i> Cushman, 1927 ..	Cretaceous—Recent	
		<i>Cuneolina</i> d'Orbigny, 1839 ..	Cretaceous—Recent	
		<i>Diculina</i> Munder-Chalmas, 1887 ..	Upper Cretaceous	
		<i>Lichusella</i> Cushman, 1933 ..	Eocene—Recent	
		<i>Trilaxilina</i> Cushman, 1911 ..	Eocene—Recent	
		<i>Hagenovella</i> Cushman, 1933 ..	Cretaceous	
		<i>Abaxophragnum</i> Reuss, 1861 ..	Cretaceous	
		<i>Pernerina</i> Cushman, 1933 ..	Cretaceous	
		<i>Litanella</i> Schumberger, 1905 ..	Middle Eocene	
		<i>Coskulinina</i> Stache, 1875 ..	Middle Eocene	
		<i>Dictyoconus</i> Blanckenhorn, 1900 ..	Middle Eocene	
		<i>Gunderia</i> Cushman and Ponton, 1933 ..	Middle Eocene	
	Orbitolininae ..	<i>Orbitolina</i> d'Orbigny, 1850 ..	Cretaceous	
	Fam. XXXII.— VERNEULINIDAE	<i>Verneulina</i> d'Orbigny, 1840 ..	Jurassic—Recent
		<i>Trilaxia</i> Reuss, 1860 ..	Jurassic (?); Cretaceous—Recent
		<i>Gaudryina</i> d'Orbigny, 1839 ..	Jurassic—Recent
		<i>Heterostomella</i> Reuss, 1865 ..	Cretaceous—Recent
		<i>Spiroplectinida</i> Cushman, 1927 ..	Cretaceous
	<i>Gaudryinella</i> Plummer, 1931 ..	Lower Cretaceous—Recent	
	Fam. XXXIII.— FUSULINIDAE	Fusulininae ..	<i>Staffella</i> Ozawa, 1925 ..	Upper Carboniferous—Permian
			<i>Schubertella</i> Staff and Wedekind, 1910 ..	Upper Carboniferous—Permian
<i>Fusulinella</i> Möller, 1877 ..			Lower Pennsylvanian of America; Moscovian of Eurasia	
<i>Wedekindellina</i> Dunbar and Henbest, 1933 ..			Lower Pennsylvanian of America	
<i>Fusulina</i> Fischer de Waldheim, 1829 ..			Lower to Middle Pennsylvanian of America; Moscovian of Russia and Eastern Asia	
<i>Fusilla</i> Lee and Chen, 1930 ..			Moscovian of China; Lower Pennsylvanian of Texas	
Schwagerininae			<i>Triticites</i> Girty, 1904 ..	Middle Pennsylvanian to Early Permian
			<i>Schwagerina</i> Möller, 1877 ..	Early Permian
			<i>Pseudofusulina</i> Dunbar and Skinner, 1931 ..	Uppermost Pennsylvanian (?); Early Permian
			<i>Palaeofusulina</i> Deprat, 1912 ..	Early Permian
		<i>Parafusulina</i> Dunbar and Skinner, 1931 ..	Early and Middle Permian	
Polydicotinae ..		<i>Polydicotina</i> Dunbar and Skinner, 1931 ..	Middle and Upper Permian	
		Verbeckininae ..	<i>Verbeckina</i> Staff, 1909 ..	Permian
			<i>Dobolina</i> Schellwien, 1902 ..	Permian
			<i>Pseudodobolina</i> Yabe and Hanzawa, 1932 ..	Permian
		Neoschwagerininae	<i>Cancellina</i> Hayden, 1910 ..	Permian
<i>Neoschwagerina</i> Yabe, 1903 ..			Permian	
<i>Yabeina</i> Deprat, 1914 ..			Permian	
<i>Sumatrana</i> Volz, 1904 ..			Permian	

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